

IN THE UNITED STATES DISTRICT COURT  
FOR THE WESTERN DISTRICT OF OKLAHOMA

(1) A TO Z MACHINING SERVICE,	)	
LLC; and	)	
(2) FLATSAFE SHELTERS, LLC,	)	
	)	
Plaintiffs,	)	
	)	
vs.	)	No. CIV-10-422-C
	)	
(1) NATIONAL STORM SHELTER,	)	
LLC; formerly doing business as	)	
(2) TURNER MACHINE CO., INC.; and	)	
(3) JEFFREY D. TURNER, an individual,	)	
	)	
Defendants.	)	

**MEMORANDUM OPINION AND ORDER**

Plaintiffs A to Z Machining Services, LLC (“A to Z”), and Flatsafe Shelters, LLC (“Flatsafe”), brought suit against Defendants National Storm Shelter, LLC (“National”), Turner Machine Co. (“Turner Co.”), and Jeffrey Turner (“Turner”) claiming Defendants’ storm shelters infringed on Plaintiffs’ patent and copyrights. On August 3, 2011, the Court held a Markman hearing where the parties presented their arguments for claim construction. Markman v. Westview Instruments, Inc., 52 F.3d 967 (Fed. Cir. 1995) (en banc), aff’d, 517 U.S. 370 (1996). Being fully informed, the Court will now construct the relevant claims contained in United States Patent No. 7,428,800 (“‘800 Patent”).

**I. BACKGROUND**

Plaintiffs manufacture and install patented below-ground storm shelters in garages of residential homes for homeowners to escape dangerous storms. This specific shelter was designed to allow the shelter lid to slide up and over the surrounding ground, despite debris,

without causing interruption to homeowners' normal garage use. Plaintiffs own the '800 Patent that covers this shelter. Claim 1 of the '800 Patent states the following:

1. An underground shelter of the type having a front wall, a back wall, two opposing side walls, a bottom and a top defining a substantially rectangular box with an opening defined in the top, a flat lid adapted to cover the opening, a roller means for alternately rolling the lid to expose or close the open top, the improvement comprising:

- a. substantially, the entire top of the box defining an opening:
- b. the lid adapted to be substantially flush with the surrounding ground level in a closed position: and
- c. a roller means comprising:
  - i. a track affixed to each of the side walls near the open top and parallel thereto,
  - ii. at least one upper track roller disposed between the lid and each track, each upper track roller rollingly supporting the lid as it moves relative to the track,
  - iii. a support means for supporting a leading edge of the lid as it slides over the surrounding ground level, the support means having:
    - (1) at least one rail roller adjacent to the back wall disposed between the lid and the track,
    - (2) a lower track roller attached to the lid near the trailing edge, the lower track roller engaging a lower track surface,
    - (3) at least one rail affixed to the underside of the lid between the rail roller and the lid, each rail having a sloped section near the leading edge of the lid, whereby when the leading edge moves away from the back wall, the lid is displaced upwardly by operation of the sloped section against the rail roller, providing additional clearance for the lid as it passes over the ground surface.

The relevant language to be construed in this Claim includes the following:

(1) "substantially flush" in Claim 1(b); (2) "rail roller" in Claim 1(c)(iii)(1); (3) "adjacent" in Claim 1(c)(iii)(1); (4) "lower track roller" in Claim 1(c)(iii)(2); and (5) "rail" in Claim

1(c)(iii)(3). Plaintiffs seek construction of two additional phrases, which the Court finds redundant and unnecessary in light of the constructed language herein. (Pls.’ Br., Dkt. No. 38, at 21-23 (seeking construction of “rail affixed to the underside of the lid between the rail roller and the lid” and “each rail having a sloped section near the leading edge of the lid”).)

## II. CLAIM CONSTRUCTION STANDARD

When determining patent infringement, courts must first determine the scope and meaning of the asserted patent claims. Cybor Corp. v. FAS Techs., Inc., 138 F.3d 1448, 1454 (Fed. Cir. 1998); Phillips v. AWH Corp., 415 F.3d 1303, 1312 (Fed. Cir. 2005) (“It is a ‘bedrock principle’ of patent law that ‘the claims of a patent define the invention to which the patentee is entitled the right to exclude.’” (quoting Innova/Pure Water, Inc. v. Safari Water Filtration Sys., Inc., 381 F.3d 1111, 1115 (Fed. Cir. 2004))). Claim construction is an issue of law that is done without reference to the allegedly infringing device. Markman, 52 F.3d at 970-71; Cohesive Techs., Inc. v. Waters Corp., 543 F.3d 1351, 1367 (Fed. Cir. 2008). When construing claims, a court first must consider intrinsic evidence to determine the meaning the term would have to a person of ordinary skill in the art in question at the time of invention. Invitrogen Corp. v. Biocrest Mfg., L.P., 327 F.3d 1364, 1367 (Fed. Cir. 2003). To begin this inquiry, courts consider the express language in the claims, the specification, and prosecution history. Lazare Kaplan Int’l, Inc. v. Photoscribe Techs., Inc., 628 F.3d 1359, 1368 (Fed. Cir. 2010).

If the intrinsic evidence does not establish the proper interpretation of the claim, courts may consider extrinsic evidence, or evidence external to the patent and prosecution

history, which includes inventor testimony, expert testimony, and dictionaries. L.B. Plastics, Inc. v. Amerimax Home Prods., Inc., 499 F.3d 1303, 1308 (Fed. Cir. 2007). However, “a claim construction analysis must begin and remain centered on the claim language itself, for that is the language the patentee has chosen to ‘particularly point[ ] out and distinctly claim[ ] the subject matter which the patentee regards as his invention.’” Innova/Pure Water, Inc., 381 F.3d at 1116 (alterations in original) (quoting Interactive Gift Exp., Inc. v. Compuserve, Inc., 256 F.3d 1323, 1331 (Fed. Cir. 2001) (quoting 35 U.S.C. § 112 (2000))).

When the ordinary meaning of claim language, as understood by one skilled in the art, is apparent to lay judges, “general purpose dictionaries may be helpful.” Phillips, 415 F.3d at 1314. However,

In many cases that give rise to litigation, . . . determining the ordinary and customary meaning of the claim requires examination of terms that have a particular meaning in a field of art. Because the meaning of a claim term as understood by persons of skill in the art is often not immediately apparent, and because patentees frequently use terms idiosyncratically, the court looks to “those sources available to the public that show what a person of skill in the art would have understood disputed claim language to mean.” Those sources include “the words of the claims themselves, the remainder of the specification, the prosecution history, and extrinsic evidence concerning relevant scientific principles, the meaning of technical terms, and the state of the art.”

Id. (citations omitted) (quoting Innova, 381 F.3d at 1116). Once the claims are construed by the court, those claims are then compared to the allegedly infringing device; however, the allegedly infringing device has no affect on the construction of the claim. SRI Int’l v. Matsushita Elec. Corp. of Am., 775 F.2d 1107, 1118 (Fed. Cir. 1985).

### III. DISCUSSION

#### *A. Substantially Flush*

The first language to be construed is “substantially flush” in Claim 1(1)(b). Plaintiffs interpret this language to mean “in close proximity to, but slightly raised from.” Plaintiffs argue that the use of “substantial” in the claim demonstrates that the word is used elastically to indicate imprecision. Specifically, “substantially” is used three times in the claim: “substantially rectangular box;” “substantially, the entire top of the box defining an opening;” and “substantially flush with surrounding ground level.” (Pls.’ Br., Dkt. No. 38 Ex. 1.) Plaintiffs argue that the use of substantially in reference to the shape of the box is illustrative because the box is tapered at the ends and is not a perfect rectangle.<sup>1</sup>

Defendants interpret this language to mean “coplanar with or offset from by an amount less than what creates an obtrusive trip[ping] hazard.” (Defs.’ Br., Dkt. No. 39, at 12.) As support for their interpretation, Defendants rely on language in the specification and prior art. Specifically, Defendants argue that specification language indicating the purpose of the “substantially flush” lid, which is to provide an unobtrusive profile, informs the meaning of “substantially flush.” Additionally, Defendants point to the differentiation made between the ‘800 Patent and the Poole, U.S. Patent No. 5,953,866 (“‘866 Patent), in the

---

<sup>1</sup> Plaintiffs also point to the alleged infringer’s testimony as support for their interpretation, upon which the Court does not rely due to the clarity of the term from the intrinsic evidence. See Innova/Pure Water, Inc., 381 F.3d at 1116; see also Vitronics Corp. v. Conceptronic, Inc., 90 F.3d 1576, 1584 (Fed. Cir. 1996) (“Only if there were still some genuine ambiguity in the claims, after consideration of all available intrinsic evidence, should the trial court have resorted to extrinsic evidence, such as expert testimony, in order to construe claim[s].”).

specification as further support for their interpretation of “substantially flush.” The ‘866 Patent is indicated in the specification as the closest prior art to the ‘800 Patent which is differentiated from the ‘866 Patent because “the [‘866 Patent] lid is well above ground level, which may prevent a vehicle from parking above the shelter if installed in a garage and which would also present a tripping hazard.” (Pls.’ Br., Dkt. No. 38 Ex. 1 col. 1:33-:41, 1:67-2:3.)

The Court finds that “substantially flush” in this context is somewhere between Plaintiffs’ and Defendants’ interpretations. In addition to the use of “substantial” in the claim, the specification distinguishes the closest prior art, the ‘866 Patent, and the ‘800 Patent in terms of the lid, and, more specifically, in terms of the usability of the surrounding space once that lid is closed, which informs the meaning of “substantially flush” in this context. See Medrad, Inc. v. MRI Devices Corp., 401 F.3d 1313, 1319 (Fed. Cir. 2005) (“‘We cannot look at the ordinary meaning of the term . . . in a vacuum. Rather, we must look at the ordinary meaning in the context of the written description and the prosecution history[ . . . ].’”) (first alteration in original) (quoting DeMarini Sports, Inc. v. Worth, 239 F.3d 1314, 1324 (Fed. Cir. 2001)). Accordingly, the Court construes “substantially flush” in Claim 1(1)(b), as used in its ordinary and customary meaning to one skilled in the art, as “coplanar with or offset from by an amount that does not interfere with normal garage use, including parking cars or walking.”

### *B. Rail Roller*

Claim 1(c)(iii)(1) describes “at least one rail roller adjacent to the back wall disposed between the lid and the track.” Plaintiffs interpret “rail roller” in this section to mean “a bearing that rolls in contact with a sloped surface causing the lid to rise up and over the surrounding ground surface as it opens.” (Pls.’ Br., Dkt. No .38, at 13.) As support for this functional interpretation, Plaintiffs cite their expert witness’s and alleged infringer’s testimony which describe “rail roller” as a surface on which a roller rolls that causes the lid to move up and over the ground surface. Defendants argue that Plaintiffs’ reliance on extrinsic evidence is unnecessary given the clarity of the meaning of “rail roller” in light of intrinsic evidence—the Court agrees.

Additionally, Plaintiffs cite the following specification language as support for their interpretation:

FIGS. 9A-9C show the cooperative action of the rail roller **122** and the sloped section **116** to lift the lid **112** as it slides open so as to allow it to rollingly pass over the surrounding ground level **108**. FIG. 9A shows the lid **112** in a closed position, and the rail roller **122** in direct contact with the lid.

(Pls.’ Br., Dkt. No. 38 Ex. 1 col. 6:3-:7.) Plaintiffs argue this language proves that the rail roller may either be in direct contact with the lid or the sloped section.

“Rail roller” is used numerous times in the claim and specification, and in these instances is described, or depicted, as rolling on the rails. (See, e.g., id. figs. 9B & C.) And the Court finds no reason to rely on Plaintiffs’ expert’s testimony and conclusions regarding the alternate meaning of “rail roller” given the clarity of the claim language and specification.

Vitronics Corp., 90 F.3d at 1584. The insertion of “bearing” into the meaning of “rail roller” would introduce an unintended expansion into claim 1. See Chimie v. PPG Indus., Inc., 402 F.3d 1371, 1384 (Fed. Cir. 2005). Because the claim language and specification makes clear the meaning of “rail roller” as “a roller that rolls on a rail,” no such evidence need be relied upon. Additionally, the meaning of “rail” is described below as a distinctly construed term and its meaning is constant. Therefore, “rail roller” is construed as “a roller that rolls on a rail.”

### *C. Adjacent*

Claim 1(c)(iii)(1) describes “at least one rail roller adjacent to the back wall disposed between the lid and the track.” In this claim, adjacent is used in two respects: as simply “adjacent,” and as “more closely adjacent.” Plaintiffs argue that this difference indicates that “adjacent” is not used comparatively and that “more closely adjacent” is. (Pls.’ Br., Dkt. No. 38 Ex. 1 col. 4:47-:49.) Plaintiffs assert that “adjacent” means the following: “not distant: nearby with the absence of anything of the same kind in between.” (Pls.’ Br., Dkt. No. 38, at 20.) Defendants agree, but assert that the meaning of “adjacent” should also include stationary, because the moving trailing edge of the lid is defined in terms of being “more closely adjacent” to the back wall. Defendants interpret “adjacent” to mean “not distant: nearby and stationary with the absence of anything of the same kind in between.” (Defs.’ Br., Dkt. No. 39, at 17.)

Besides pointing to the fact that the portion of the device that is described by “more closely adjacent” happens to move, Defendants have not offered any evidence that the



ordinary and customary understanding of “adjacent” by one skilled in the art is in terms of movability. Nor is the Court so persuaded. Phillips, 415 F.3d at 1314 (“In some cases, the ordinary meaning of claim language as understood by a person of skill in the art may be readily apparent even to lay judges, and claim construction in such cases involves little more than the application of the widely accepted meaning of commonly understood words.”). Accordingly, the term “adjacent” in claim 1 of the ‘800 Patent is construed as “not distant: nearby with the absence of anything of the same kind in between.”

#### *D. Lower Track Roller*

Claim 1(c)(iii)(2) states the following: “a lower track roller attached to the lid near the trailing edge, the lower track roller engaging a lower track surface.” Plaintiffs interpret “lower track roller” to mean: “a bearing for engaging the lower track surface to prevent the lid from tipping as it passes over the surrounding ground surface.” (Pls.’ Reply, Dkt. No. 41, at 4-5.) Defendants claim that prosecution history exemplifies that “rollers that are placed . . . below the track” was part and parcel of the United States Patent and Trademark Office’s (“Patent Office”) reason for allowance. Defendants argue that Plaintiffs’ interpretation ignores this limitation by seeking to expand the meaning beyond roller. Defendants interpret “lower track roller” as “a roller that rolls on a lower surface of a track.” (Defs.’ Br., Dkt. No. 39, at 18.)

The Court agrees that the prosecution history limits Plaintiffs’ sought-for construction regarding the present language. On June 17, 2004, Plaintiffs filed an application for the ‘800 Patent. (Pls.’ Br., Dkt. No. 38, at 1.) Original claim 1 stated the following:

1. An improved shelter of the type having a front wall, a back wall, two opposing side walls, a bottom and a top defining a substantially rectangular box with an opening defined in the top, a flat lid adapted to cover the opening, a roller means for alternately rolling the lid to expose or close the open top, the improvement comprising:

- a. substantially, the entire top of the box defining an opening;
- b. the lid adapted to be substantially flush with the surrounding ground level in a closed position; and
- c. a roller means for allowing the lid to slide above the ground level, exposing more than half of the top when in an open position.

(Id. Ex. 3, at 3.) The Patent Office rejected Plaintiffs’ original claims 1 through 7, 9 through 20, and claim 22 due to a lack of novelty and objected to claims 8 and 21 as depending on disallowed base claims. (Id. Ex. 1.) The inventor did not object to these findings; rather, he amended the allowable claims 8 and 21 to incorporate the limitations of the claims on which they depended, but made no substantive changes. (Pls.’ Br., Dkt. No. 38 Ex. 3 at 9 (“[R]ather than arguing the merits in the present application, Applicant has amended allowable dependent claims 8 and 21 to incorporate the limitations of the claims from which they depend, so those claims should be allowed as re-written.”).) This caused original claim 8, which was initially dependant on original claim 7—which in turn was dependent on independent, original claim 1—to become independent by deleting “The support means of claim 7 further comprising . . . .” (Id. Ex. 3, at 4.) Amended claims 9 through 14 then depended on original claim 8, and amended claim 22 depended on original claim 21. (Id. at 5-8.) On September 30, 2008, the Patent Office issued the patent.<sup>2</sup>

---

<sup>2</sup> On July 21, 2010, Plaintiffs sought amendment of the Patent to broaden the claims regarding rollers and sloped rails. On April 27, 2010, about three months before the sought-for amendment, Plaintiffs filed the present suit. On September 20, 2010, Defendants protested the reissue application, and thereafter submitted amended protests. Defendants claim that Plaintiffs

The prosecution history outlined above indicates that the originally sought-for claims, which were rejected by the Patent Office, were too broad for that office to issue a patent. The examiner's reason for allowance of the narrower, amended claims included the compilation of the following elements: "a track affixed to the side walls and at least one rail affixed to the lid," "a series of rollers that are placed between both the lid and track[] and below the track," and "a sloped section on the rail affixed to the lid [that] interacts with the rail roller to displace the lid upwardly allowing the lid to clear the surrounding surface." (Defs.' Br., Dkt. No. 39 Ex. 10, at 3 (emphasis added).)

This limitation prohibits Plaintiffs from broadening the element to mean "a bearing for engaging the lower track surface to prevent the lid from tipping as it passes over the surrounding ground surface." Phillips, 415 F.3d at 1317 (finding that "prosecution history can often inform the meaning of the claim language by demonstrating how the inventor understood the invention and whether the inventor limited the invention in the course of prosecution, making the claim scope narrower than it would otherwise be"). Accordingly, the Court construes "lower track roller" as "a roller that rolls on a lower surface of a track."

#### *E. Rail*

Finally, Claim 1(c)(iii)(3) states that: "at least one rail affixed to the underside of the lid between the rail roller and the lid, each rail having a sloped section near the leading edge of the lid, whereby when the leading edge moves away from the back wall, the lid is

---

surrendered any subject matter that broadens the subject matter of original dependent claim 8. If the Patent Office grants Plaintiffs' request to broaden the scope of the claims, this would moot the current litigation and the Court's construction of the current claims.

displaced upwardly by operation of the sloped section against the rail roller, providing additional clearance for the lid as it passes over the ground surface.” Plaintiffs interpret “rail” to mean “a surface against which a roller may operate,” and cite as support for this interpretation the following specification language:

FIGS. 9A-9C show the cooperative action of the rail roller **122** and the sloped section **116** to lift the lid **112** as it slides open so as to allow it to rollingly pass over the surrounding ground level **108**. FIG 9A shows the lid **112** in a closed position, and the rail roller **122** in direct contact with the lid.

(Pls.’ Br., Dkt. No. 38 Ex. 1 col. 6:3-:7 (emphasis added).) Additionally, Plaintiffs cite as support both of their experts’ opinions that rail means “a surface that a bearing or roller rides on.” (Pls.’ Br., Dkt. No. 38, at 15.) As support for their argument that a feature of an element may be separately added or inherent in that element—here, a rail being inherent in the lid—Plaintiffs rely on Cargill, Inc. v. Sears Petroleum & Transport Corp., 334 F. Supp. 2d 197, 221-22 (N.D.N.Y. 2004).

Defendants cite as support for their interpretation the following relevant Claim language: “at least one rail affixed to the underside of the lid between the rail roller and the lid, each rail having a sloped section near the leading edge of the lid, whereby when the leading edge moves away from the back wall, the lid is displaced upwardly by operation of the sloped section against the rail roller, providing additional clearance for the lid as it passes over the ground surface.” (Defs.’ Br., Dkt. No. 39 Ex. 6 col. 7:42-48.) Defendants argue that this claim language proves that rail means affixed to the lid with a sloped section, which operates against the rail roller to displace the lid upwardly. The Court agrees.

The claim language itself, in addition to the specification and reason for allowance, expressly encompasses within the meaning of “rail” the sloped section, being affixed to the underside of the lid, and displacing the lid upward. In addition to the above-cited claim 1 language, the specification states that

The support means may further comprise a rail affixed to the underside of the lid between the rail roller and the lid, the rail having a sloped section near the leading edge, whereby when the leading edge moves away from the back wall, the lid is displaced upwardly by the sloped section operating against the rail roller . . . .

(Id. Ex. 6 col. 2:54-:59.) Additionally, the sloped rail’s affixation to the lid was part of the reason for allowance by the Patent Office, as previously discussed, which marked the difference between the ‘800 Patent and another patent, the Pierson U.S. Patent No. 3,114,153. (Defs.’ Br., Dkt. No. 39 Ex. 10 at 3 (“The closest cited prior art, Pierson . . . functions in a similar manner. . . . [but] it lacks the structure claimed in the present invention,” including a sloped section on the rail affixed to the lid that interacts with the rail roller).) While the Court does not necessarily disagree with Plaintiffs’ argument that a feature can be inherent in an element, that is simply not the case here, where the meaning of rail is limited by other qualifications that the lid does not satisfy. Considering the express language of the Claim, the specification, and prosecution history, the Court construes “rail” as “a support member having a sloped section, affixed to the underside of the lid, selectively contacting the rail roller to raise the lid and support the lid in the raised position.”<sup>3</sup>

---

<sup>3</sup> In addition to the elements construed herein, Defendants sought this Court’s ruling regarding whether the language “support means” and “a roller means” fit within the parameters of 35 U.S.C. § 112(6). While Plaintiffs briefly addressed Defendants’ assertion during the

#### IV. CONCLUSION

For the above stated reasons, the Court so construes the following language in Claim 1 of the '800 Patent: (1) “substantially flush” as “coplanar with or offset from by an amount that does not interfere with normal garage use, including parking cars or walking;” (2) “rail roller” as “a roller that rolls on a rail;” (3) “adjacent” as “not distant: nearby with the absence of anything of the same kind in between;” (4) “lower track roller” as “a roller that rolls on a lower surface of a track;” (5) “rail” as “a support member having a sloped section, affixed to the underside of the lid, selectively contacting the rail roller to raise the lid and support the lid in the raised position;” and (6) “affixed” as “attached.”

IT IS SO ORDERED this 16th day of August, 2011.

  
ROBIN J. CAUTHRON  
United States District Judge

---

Markman hearing, the parties have not fully briefed the issue and the Court will not now attempt to resolve it without the benefit of such briefing. (See Pls.' Suppl., Dkt. No. 47 Ex. 1, at 99 (briefly touching on the means-plus-function doctrine in a presentation).) Also, Defendants sought construction of “affixed” as “attached,” to which Plaintiffs agreed and the Court will now so construe. (Defs.' Br., Dkt. No. 39, at 23; Pls.' Suppl., Dkt. No. 47 Ex. 1, at 98.)